

**UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF TEXAS  
DALLAS DIVISION**

COMMSCOPE TECHNOLOGIES LLC	)	
	)	
Plaintiff,	)	No. 3:16-cv-477
Counterclaim Defendant	)	
	)	
v.	)	
	)	
DALI WIRELESS, INC.	)	
Defendant.	)	
Counterclaim Plaintiff	)	
	)	
v.	)	
	)	
COMMSCOPE TECHNOLOGIES LLC	)	
and COMMSCOPE CONNECTIVITY	)	
LLC	)	
Counterclaim Defendant	)	

**COMMSCOPE’S REPLY MEMORANDUM  
IN SUPPORT OF ITS MOTION FOR  
JUDGMENT AS A MATTER OF LAW AND NEW TRIAL**

## Table of Contents

I.	The Court should grant JMOL that Claim 1 of the ‘521 patent is invalid .....	1
A.	“Bauder” anticipates Claim 1 .....	1
B.	“Wright” anticipates Claim 1 .....	5
C.	“Khan” anticipates Claim 1 .....	7
i.	The two lookup table elements (“generating....” and “retrieving...” ) .....	7
ii.	The “establishing....” element .....	8
II.	The Court should grant JMOL that Claim 1 of the ‘521 patent is not infringed.....	9
A.	The limitation on the controller <u>itself</u> : “switching a controller off to ....” .....	9
B.	The limitation of <u>separate</u> phase: “a training phase ... an operating phase” .....	12
III.	The Court should grant JMOL that the claims of the ‘473 patent are invalid.....	12
IV.	The Court should grant JMOL that the claims of the ‘473 patent are not infringed.....	14
V.	The Court should grant a new trial on infringement and invalidity of Dali’s Patents .....	15

## Table of Authorities

### Cases

<u>Amazon.com, Inc. v. Barnesandnoble.com, Inc.</u> ,	
239 F.3d 1343 (Fed. Cir. 2001).....	7
<u>ArthroCare Corp. v. Smith &amp; Nephew, Inc.</u> ,	
406 F.3d 1365 (Fed. Cir. 2005).....	1, 8, 9
<u>Arthur A. Collins, Inc. v. N. Telecom Ltd.</u> ,	
216 F.3d 1042 (Fed. Cir. 2000).....	11
<u>Avia Grp. Int’l, Inc. v. L.A. Gear Cal., Inc.</u> ,	
853 F.2d 1557 (Fed. Cir. 1988).....	7
<u>Becton Dickinson &amp; Co. v. C.R. Bard, Inc.</u> ,	
922 F.2d 792 (Fed. Cir. 1990).....	11
<u>Celeritas Techs., Ltd. v. Rockwell Int’l Corp.</u> ,	
150 F.3d 1354 (Fed. Cir. 1998).....	7
<u>DDR Holdings, LLC v. Hotels.com, L.P.</u> ,	
773 F.3d 1245 (Fed. Cir. 2014).....	12
<u>Dynacore Holdings Corp. v. U.S. Philips Corp.</u> ,	
363 F.3d 1263 (Fed. Cir. 2004).....	10
<u>Finjan, Inc. v. Blue Coat Sys.</u> ,	
879 F.3d 1299 (Fed. Cir. 2018).....	5
<u>Guile v. United States</u> ,	
422 F.3d 221 (5th Cir. 2005).....	11
<u>Hewlett-Packard v. Mustek</u> ,	
340 F.3d 1314 (Fed. Cir. 2003).....	1
<u>Huss v. Gayden</u> ,	
571 F.3d 442 (5th Cir. 2009).....	11
<u>Imperium IP Holdings (Cayman), Ltd. v. Samsung Elecs. Co.</u> ,	
757 F. App’x 974 (Fed. Cir. 2019) .....	2, 5
<u>Intellectual Sci. &amp; Tech., Inc. v. Sony Elecs., Inc.</u> ,	
589 F.3d 1179 (Fed. Cir. 2009).....	11
<u>Johns Hopkins Univ. v. Datascope Corp.</u> ,	
543 F.3d 1342 (Fed. Cir. 2008).....	1
<u>King Pharm., Inc. v. Eon Labs., Inc.</u> ,	
616 F.3d 1267 (Fed. Cir. 2010).....	4
<u>Krippelz v. Ford Motor Co.</u> ,	
667 F.3d 1261 (Fed. Cir. 2012).....	1, 5
<u>Microsoft Corp. v. i4i Ltd. P’ship</u> ,	
564 U.S. 91, 131 S. Ct. 2238 (2011) .....	5

<u>Myers Squibb Co. v. Ben Venue Labs., Inc.</u> ,	
246 F.3d 1368 (Fed. Cir. 2001).....	7
<u>On-Line Techs., Inc. v. Bodenseewerk Perkin-Elmer GmbH</u> ,	
386 F.3d 1133 (Fed. Cir. 2004).....	13
<u>Prima Tek II, L.L.C. v. Polypap</u> ,	
412 F.3d 1284 (Fed. Cir. 2005).....	4, 7, 8
<u>PXL Holdings v. Amazon.com</u> ,	
430 F.3d 1377 (Fed. Cir. 2005).....	7
<u>S.-Tek Sys. v. Engineered Corrosion Sols., LLC</u> ,	
748 F. App'x 1003 (Fed. Cir. 2018).....	2
<u>Sciele Pharma, Inc. v. Lupin Ltd.</u> ,	
684 F.3d 1253 (Fed. Cir. 2012).....	7
<u>Smith v. Garlock Equip. Co.</u> ,	
658 F. App'x 1017 (Fed. Cir. 2016) .....	passim
<u>Stone Strong, LLC v. Del Zotto Prods. of Fla.</u> ,	
455 F. App'x 964 (Fed. Cir. 2011) .....	8
<u>Summit Tech., Inc. v. Nidek Co.</u> ,	
363 F.3d 1219 (Fed. Cir. 2004).....	1
<u>Synthetic Fuels, LLC v. Neste Oil Oyj</u> ,	
841 F.3d 954 (Fed. Cir. 2016).....	4
<u>Telemac Cellular Corp. v. Topp Telecom, Inc.</u> ,	
247 F.3d 1316 (Fed. Cir. 2001).....	8
<u>Thorner v. Sony Computer Entm't Am. LLC</u> ,	
669 F.3d 1362 (Fed. Cir. 2012).....	8
<u>Ultradent Prods. v. Life-Like Cosmetics, Inc.</u> ,	
127 F.3d 1065 (Fed. Cir. 1997).....	1
<u>Verdegaal Bros. v. Union Oil Co.</u> ,	
814 F.2d 628 (Fed. Cir. 1987).....	8

#### **Other Authorities**

5A Chisum on Patents § 18.06 (2019) .....	10
---	----

A1-A1006 and SA1-SA1605 are in the CommScope appendices filed on September 6, 2019. A1007-A1114 and SA1606-SA1676 are in the appendices filed on September 24, 2019. A1115-1253 and SA1677-1679 are in the appendices filed on October 8, 2019.

**I. The Court should grant JMOL that Claim 1 of the ‘521 patent is invalid**

**A. “Bauder” anticipates Claim 1**

There are five key points to take away from Dali’s opposition. *First*, Dali heavily relies on a mischaracterization of Bauder. Dali suggests Bauder’s teaching is that the training circuit continues to operate during normal transmission mode. This is a new interpretation (Dali’s expert never said this). Dali cites the phrases “may operate” and “generally”:

[0014] In one embodiment of the present invention, the predistorter training circuit operates only in a training mode. Alternatively, the predistorter training circuit may operate while the transceiver is in its normal transmit mode.

[0033] ...The training circuit 290 would generally operate only when the predistortion system 200 is in training mode.

(A444-45.) Paragraph 14 explains that the training circuit does not operate during the normal mode in the disclosed embodiment (*i.e.*, the preferred embodiment), but recognizes there could be an alternative embodiment. The use of “generally” in Paragraph 33 relates back to this. It acknowledges the preferred embodiment, but leaves room for an alternative embodiment.

CommScope’s theory was about the main embodiment. (A348 at 102:24-104:2.) Dali’s citation of an alternative is non-responsive. It also fails as matter of law. A closely on point case is ArthroCare Corp. v. Smith & Nephew, Inc., 406 F.3d 1365 (Fed. Cir. 2005). The prior art disclosed an embodiment that met the claim and also one that did not. Id. The jury found no anticipation, but the Federal Circuit reversed and held JMOL should have been granted. Id. at 1367, 1374. It was sufficient that the prior art disclosed an embodiment that anticipated. Id. at 1372. The Federal Circuit has repeatedly rejected such arguments and held JMOL be granted.<sup>1</sup>

*Second*, Dali has no response to: how is it physically possible that the signal from the PA would remain connected to the lookup table when the training circuit stops operating? Cases support JMOL when there is an impossibility.<sup>2</sup> Dali’s expert never explained this. Dali’s *counsel*

---

<sup>1</sup> Krippelz v. Ford Motor Co., 667 F.3d 1261, 1268 (Fed. Cir. 2012); Ultradent Prods. v. Life-Like Cosmetics, Inc., 127 F.3d 1065, 1068 (Fed. Cir. 1997); Hewlett-Packard v. Mustek, 340 F.3d 1314, 1326 (Fed. Cir. 2003) (“product that sometimes, but not always, embodies a claimed method nonetheless teaches that aspect of the invention.”)

<sup>2</sup> Johns Hopkins Univ. v. Datascope Corp., 543 F.3d 1342, 1348 (Fed. Cir. 2008) (holding JMOL should have been granted; expert’s testimony required a conclusion that was “impossible”); Summit Tech., Inc. v. Nidek Co., 363 F.3d 1219, 1229 (Fed. Cir. 2004) (affirming JMOL; expert’s testimony not substantial evidence because it required something that was “technologically” impossible”).

points to Bauder's alternative embodiment. That's irrelevant. The point is when the training circuit *stops* operating in the *main embodiment* it is impossible that the signal remains connected.

*Third*, CommScope is correct that the substance of CommScope's expert testimony was undisputed. Imperium IP Holdings (Cayman), Ltd. v. Samsung Elecs. Co., 757 F. App'x 974, 979 (Fed. Cir. 2019) (JMOL should be granted when this happens). Dali says its expert disputed the "three premises," but the evidence Dali cites shows that is not true.

**First premise:** CommScope asserted Dali's expert did not dispute that Bauder's training circuit is a "controller." Dali cites this answer from its expert during cross-examination:

Q. Now, Dr. Kenney, staying on this slide and looking at this picture, you would agree if we just follow the blue arrow, there's a red X that matches "operate only," meaning it's not operating now. The blue arrow cannot connect to the look-up table, correct?

A. But that's what I -- I disagree that it's disconnecting the signal representative of the power amplifier. The training circuit that you've crossed through is not responsible for that. It is responsible for calculating the value that goes into the look-up table.

(A372 at 66:6-15.) This does not dispute the training circuit is a "controller." It merely disputes what it controls. Note that Dali's expert evaded answering the hard question.<sup>3</sup>

Dali's distinction does not help Dali. Claim 1 is not talking about connecting/disconnecting a *physical* component. It concerns connecting/disconnecting a "signal" from a lookup table. A lookup table is *memory* that stores *numbers*. (A278 at 45:5-10; A920 at 8:2-3, 6-9.) The '521 patent teaches connecting a signal to a table by using the signal to update the values in the table (see Figure 3, below). Claim 1 confirms this where it refers to "*establishing* pre-computed distortion *contributions* based on . . . feedback *signals* . . . and *storing* the pre-computed distortion contributions in a lookup table." Reciprocally, you disconnect a signal by stopping the updating of the table. Your Honor recognized this in the claim construction order:

The *specification gives guidance* on when the controller is turned off ("[a]fter the training procedure [is] completed") and *what the effect of turning off is* ("*predistortion lookup tables . . . are no longer updated adaptively*"). See '521

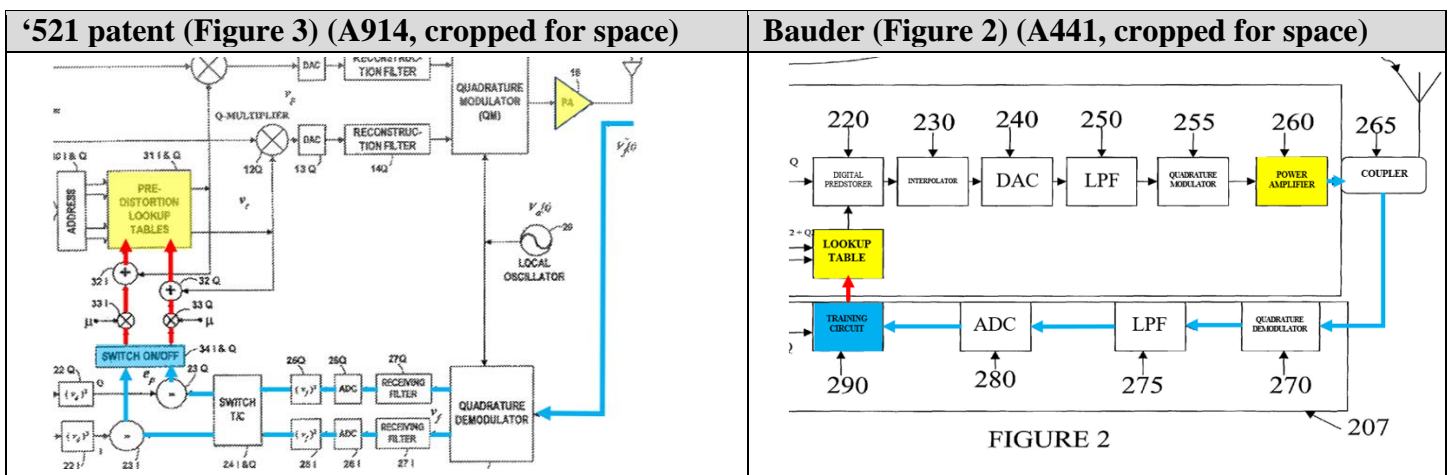
---

<sup>3</sup> He was asked: "The blue arrow cannot connect to the look-up table, correct?" Dali's expert did not say it could connect (or explain how), but rather deflected by disputing the *purpose* of the circuit. Smith v. Garlock Equip. Co., 658 F. App'x 1017, 1025 (Fed. Cir. 2016) (holding JMOL should have been granted and saying "notably" the expert evaded the issue on cross-examination); S.-Tek Sys. v. Engineered Corrosion Sols., LLC, 748 F. App'x 1003, 1006 (Fed. Cir. 2018) ("It is irrelevant that the prior art primarily used the drain for a different purpose."). He was unable dispute the relevant point: the *effect* of switching the circuit off is the signal can no longer connect (it disconnects).

**patent at 6:37-41.**

(ECF 97 at 25 (emphasis added).) The language in the claim about disconnecting refers to this effect of stopping updating the table described in the specification.

That Bauder discloses this element cannot be credibly disputed. The testimony Dali cites is an admission in CommScope's favor. Bauder teaches the training circuit controls "update[ing]" the lookup table. (A445 at [0036] ("training circuit 290 is then employed to update the alternative predistortion coefficients...to cause the lookup table 225 to provide alternative coefficients"))(emphasis added).) Compare the '521 patent and Bauder:



Just like "switch on/off" in the '521 patent (blue), the training circuit (blue) in Bauder is what controls whether new values are calculated and stored to the lookup table.

*Second premise:* CommScope asserted Dali's expert did not dispute Bauder teaches the training circuit is switched to a 'non-operating' state during normal transmission mode. Dali says he did and cites the same passage quoted above. Nowhere in that passage does Dali's expert dispute that the training circuit is switched to a non-operating state. Only Dali's *counsel* now disputes this (based on their interpretation of "may" and "generally," explained above).

*Third premise:* CommScope asserted that Dali's expert did not dispute "no signals pass through" the training circuit when it stops operating (which means the signal from the PA is necessarily disconnected because it would be "physically impossible" for the signal from the PA to remain connected). Dali again cites the same passage quoted above. Nowhere in the passage did Dali's expert dispute that no signals pass through the training circuit when it switched to a

non-operating state. Dali's *counsel* returns to the same mischaracterization about the term "may."

Casting this as an inherency issue,<sup>4</sup> Dali says the use of "may" in Bauder shows there is a possibility the signal remains connected. The reference to "may" relates to the *alternative* embodiment where the training circuit *continues* to operates. This does not explain how the signal could remain connected in the *main* embodiment when the training circuit *stops* operating.

*Fourth*, Dali's explanation of why its expert's testimony was not conclusory does not respond to CommScope's point. CommScope's opening brief cited cases where the Federal Circuit explained the expert's testimony was conclusory because it did not address the "most natural interpretation" of the relevant figure (and granted JMOL on anticipation). (ECF 451 at 5-6.) Dali says its expert "engaged" with Figure 2 and cites his testimony that Figure 2 does not show a switch. But Dali did not identify any testimony rebutting the salient point: He did not offer any explanation for how the signal could connect without the operation of the training circuit. He did not offer any other way to interpret the arrows in Figure 2. (ECF 451 at 6.)

*Fifth*, Dali did not dispute that a "switch" is not an element in Claim 1. Dali also did not dispute CommScope's legal authority that CommScope is entitled to JMOL if CommScope is right that Dali distinguished Bauder on the basis of a "switch." Dali only disputes whether its expert distinguish Bauder on the basis of a switch. Here is testimony (and Dali's closing):

<b>Dali's Expert's Testimony</b>	<b>Dali's Counsel's Closing Argument</b>
<p>Q. [...] And could you sort of summarize the nature of your disagreement with Dr. Wood?</p> <p>A. Sure. He spent a little time on this. And the main feature here is on the left-hand side. <u>There is no switch</u>. There is no means to disconnect that signal of the</p>	<p>This is Bauder. It's the one that they focused on the most. And if you remember Bauder, this is where -- where Mr. Bullard said a picture speaks a thousand words. And what is so interesting about that picture, so <u>Bauder does not have a switch</u> that a controller puts in a nonoperating position. The reason that big red "X" was put on Bauder is you can't really -- you can't really read it here, unfortunately. It's not a</p>

<sup>4</sup> CommScope's argument does not depend on inherency. Synthetic Fuels, LLC v. Neste Oil Oyj, 841 F.3d 954, 961 (Fed. Cir. 2016) ("not an inherency issue" because reference was "not silent"). The text and figure teach this element. (See ECF 451 at 1-4.) Regardless, inherency supports CommScope. Dali cites law about possibilities but omits the other half about the "natural result": "While inherent anticipation may not be established by probabilities or possibilities, if the prior art's disclosure is sufficient to show that the natural result flowing from the operation as taught would result in the performance of the questioned function, it seems to be well-settled that the disclosure should be regarded as sufficient." King Pharm., Inc. v. Eon Labs., Inc., 616 F.3d 1267, 1275 (Fed. Cir. 2010). The natural result when the training circuit stops operating is disconnecting because no signals pass through (which Dali does not dispute). Prima Tek II, L.L.C. v. Polypap, 412 F.3d 1284, 1290 (Fed. Cir. 2005) (inherent from figures).



power amplifier in the feedback path, nor is there anything that, in my opinion, was equivalent to that. (A369 at 53:23-54:4 (emphasis added).)	clean one, but <u>that's not a switch</u> . That's -- That's a -- It's a different circuit. And if you get back there and you look -- I'm blanking out because I'm going so fast, but it defines what that circuit does, and <u>that circuit is not a switch</u> that -- that -- as defined by the patent. (A429 at 151:17-152:4 (emphasis added).)
---	---

“There is no switch” is clear (everything else is just a conclusion). Dali proposes a new, nuanced interpretation, but Dali’s counsel did not argue that nuanced interpretation to the jury.

In sum, Federal Circuit law supports JMOL: Melchior, ArthroCare, Imperium, Krippelz. Dali’s expert did not identify *any* passage in Bauder that supported a conclusion the signal remains connected. Scrutiny is due: CommScope’s prior brief showed Dali abandoned the explanation it told the Court at summary judgment. Finjan, Inc. v. Blue Coat Sys., 879 F.3d 1299, 1309 (Fed. Cir. 2018) (JMOL; noting plaintiff made no showing of the reasoning from SJ). Bauder is a new reference the PTO never considered: “Simply put, if the PTO did not have all material facts before it, its considered judgment may lose significant force.” Microsoft Corp. v. i4i Ltd. P’ship, 564 U.S. 91, 111, 131 S. Ct. 2238, 2251 (2011).

### B. “Wright” anticipates Claim 1

First, Dali did not dispute if a feature “is found to meet a limitation when assessing infringement, the same feature found in the prior art *must* also meet that limitation for the purposes of assessing anticipation.” (ECF 451 at 8.) Dali also did not dispute that the switch in the accused product *is* found in the prior art—Wright’s “RF Multiplexer” is also a switch for toggling between PAs. Dali now disputes whether it said the switch in the accused product met this element for infringement. Here is Dali’s testimony and the figure presented to the jury:

Dali’s Expert	Dali’s Expert’s Companion Annotation
<p>A. [...] And the TI documents show a <u>switch</u>. This is the simplest schematic I could find. And I have circled it in red there. And various other schematics show that <u>switch</u> as well. So it meets this limitation.</p> <p>Q. And what did you identify as the <u>switch</u>?</p> <p>A. Well, the actual <u>switch</u> circuit is a series of transistors that <u>switch</u> the actual RF signal on and off. And it is also associated with a logic that controls it that is on the FPGA, all those things being on the ALPACA board.</p>	

(A282 at 61:9-17 (emphasis added); A559) This testimony is all about the “switch.”

Dali notes the reference in the final line to “logic.” No juror – who saw Dali circle the switch in red and emphasize “the switch” – would conclude Dali’s theory was actually about that logic. Dali only mentioned the logic in response to the question “what did you identify as the *switch*?” Dali’s expert never said the logic was the feature he was accusing, and he never explained why this logic goes to a non-operating state. Dali says CommScope focused on a “single annotation.” Dali’s expert only used a single annotation. (See A281-82 at 60:16-62:7.) Dali says its expert explained why he circled the switch during cross-examination. The issue is not just his annotation. It is also his testimony: “the TI documents show a switch” “so it meets this limitation.” The cross-examination was not about why Dali circled the switch. (A289-92 at 17:4-29:11.) Moreover, cross-examination testimony claiming something was shown on direct is worthless unless that thing was *actually* shown on direct – it was not. Even on redirect, Dali returned to the example of a switch: “Q. Okay. Could you explain what's going on here? A Well, you've got a toggle switch. I just chose to represent it as a light switch.” (A366 at 43:10-12.) Likewise, Dali specifically emphasized the “switch” during closing. (A429 at 150:2-12.)

*Second*, Dali’s argument confirms the related point that the Court should enter JMOL of non-infringement. Dali says it is insufficient to show a switch to meet this element:

Even if the RF MUX is a switch that can select from a number of inputs, to anticipate claim 1, Wright *must also disclose a controller that is put into a non-operating state by the switch*.

(ECF 454 at 12.) CommScope asks the Court to look back at the testimony quoted above.

Where did Dali’s expert ever explain that “also” for infringement? Where did Dali ever say the switch puts a *separate controller* in a *non-operating* state? Dali never mentioned a non-operating state. Dali vaguely references “logic,” but never says that logic goes to a non-operating state (or that the switch “puts” the logic in any state).

*Third*, CommScope is correct that Dali’s expert testimony on Wright’s RF Multiplexer was conclusory. Dali did not identify any testimony about the RF Multiplexer that CommScope missed. Instead, Dali points to testimony about Wright’s “capture buffers.” CommScope’s

theory was not about these buffers. Dali recognizes this disconnect, so it says CommScope's theory was "actually" about the buffers. Dali's alleged basis is this answer from Dali's expert:

A I'm sorry. This shows the action of the capture buffer, and it has a capture buffer that captures a certain amount of information about the power amplifier and then starts processing that information, but the flow of information is never interrupted.

(ECF 454 at 11; A370 at 57:23-58:2.) Dali's expert never said CommScope's theory was actually about the buffer. He later agreed CommScope's theory was about "another" aspect.<sup>5</sup>

Dali says that CommScope had an "enhanced burden" for Wright because it was "effectively" before the Patent Office. There is "no heightened or added burden that applies to invalidity defenses that are based upon references that were before the Patent Office." Sciele Pharma, Inc. v. Lupin Ltd., 684 F.3d 1253, 1260 (Fed. Cir. 2012)<sup>6</sup>; Avia Grp. Int'l, Inc. v. L.A. Gear Cal., Inc., 853 F.2d 1557, 1562 (Fed. Cir. 1988) ("the presumption is a procedural device. . . and does not constitute 'evidence' to be weighed..."). The Federal Circuit does not hesitate in reversing despite the art being considered.<sup>7</sup> The relevant legal principle is: "A patent may not, like a nose of wax, be twisted one way to avoid anticipation and another to find infringement." Amazon.com, Inc. v. Barnesandnoble.com, Inc., 239 F.3d 1343, 1351 (Fed. Cir. 2001).

### C. "Khan" anticipates Claim 1

#### i. The two lookup table elements ("generating..." and "retrieving...")

Dali concedes: "Dali did not argue Khan is not enabled." By confirming Dali did not dispute enablement, Dali renders its expert testimony irrelevant. Dali's expert disputed whether Khan "properly" or "really" defined two of Khan's own structural components such that a person of skill "know how to" use Khan. (A368 at 51:19-52:9.) This is only relevant to whether Khan is enabling.<sup>8</sup> The record is now: (a) CommScope's expert showed that Khan discloses these

<sup>5</sup> "Q. So you also disputed this aspect, but **he covered another one. Is that right?** A. Yes. He -- He covered the aspect of the multiplexor that's used." (A370 at 58:6-11 (emphasis added).)

<sup>6</sup>The "weight" given the evidence may change depending on the extent the PTO considered the issue. Id. at 1260. The issue is not whether a reference was "before" the PTO, rather did the PTO consider the same "*argument*." The PTO did not consider this argument because Dali did not disclose its infringement theory to the PTO. (A910-12.)

<sup>7</sup> Prima Tek II, L.L.C. v. Polypap, 412 F.3d 1284, 1287 (Fed. Cir. 2005); Celeritas Techs., Ltd. v. Rockwell Int'l Corp., 150 F.3d 1354, 1360 (Fed. Cir. 1998); PXL Holdings v. Amazon.com, 430 F.3d 1377, 1381 (Fed. Cir. 2005).

<sup>8</sup> There are two distinct questions: (a) disclosure and (b) enablement. Bristol-Myers Squibb Co. v. Ben Venue Labs., Inc., 246 F.3d 1368, 1374 (Fed. Cir. 2001) ("A claim is anticipated if each and every limitation is found either

elements (A349 at 105:18-108:19.) and (b) Dali's rebuttal testimony is irrelevant.

Dali's brief had no response on the merits to Khan's express teachings. Dali says the teachings are "attorney argument." Not true. Khan is in the record and evidence.<sup>9</sup> CommScope is not aware of any Federal Circuit case disregarding an express teaching in the prior art as attorney argument.<sup>10</sup> CommScope's expert also testified about these exact two features (the lookup encoder and lookup table) disclosed in Khan. (A349 at 106:18-107:2, 107:18-108:8.) Dali says Khan's teachings do not use "the exact terms" from Claim 1. That is not the issue. In re Bond, 910 F.2d 831, 832 (Fed. Cir. 1990) (anticipation is "not" an "ipsissimis verbis" test).<sup>11</sup>

## ii. The "establishing...." element

The issue for JMOL reduces to this element. The Court may recall that Dali originally did not dispute this element, but its expert changed theories. (ECF 178-2 at 8.) Both parties acknowledge this claim element has its plain meaning, which is the meaning to a person of skill "when read in the context of the *specification*." Thorner v. Sony Computer Entm't Am. LLC, 669 F.3d 1362, 1365 (Fed. Cir. 2012). CommScope's prior brief observed that the *specification* of the '521 patent teaches that the process of "establishing" the claimed values is "based on . . . signals representative of the output of the power amplifier" in that the process "*starts with the feedback signal from the PA.*" (ECF 451 at 9 (emphasis added).) Dali did not dispute this.

Dali did not dispute the "establishing" process in Khan "starts with the feedback signal

---

expressly or inherently in a single prior art reference. To anticipate, the reference must also enable one of skill in the art to make and use the claimed invention." (alterations, quotation marks, and internal citations omitted).)

<sup>9</sup> Dali's cited case addressed non-infringement. For invalidity, the Federal Circuit "begins" with the express teachings and frequently says expert testimony is not needed. Telemac Cellular Corp. v. Topp Telecom, Inc., 247 F.3d 1316, 1328 (Fed. Cir. 2001) (affirming SJ that the claims were anticipated: "Our review ...begins, therefore, with the express teachings of the prior art."); Prima Tek II, L.L.C. v. Polypap, 412 F.3d 1284, 1290 n.7 (Fed. Cir. 2005) (noting "expert testimony was not required" and holding the claims anticipated as a matter of law); Stone Strong, LLC v. Del Zotto Prods. of Fla., 455 F. App'x 964, 969 (Fed. Cir. 2011).

<sup>10</sup> Cf. ArthroCare Corp. v. Smith & Nephew, Inc., 406 F.3d 1365, 1374 (Fed. Cir. 2005) (holding JMOL of anticipation should have been granted: "the article speaks for itself"); Cf. Verdegaal Bros. v. Union Oil Co., 814 F.2d 628, 632 (Fed. Cir. 1987) (holding JNOV of anticipation should have been granted and noting: "[d]iscarding that testimony does not eliminate the reference itself as evidence ....").

<sup>11</sup> Khan *does* use many of the same terms (e.g., generating). Dali appears to be referring to fact that Khan says "generating an *index*" while Claim 1 says "generating a digital lookup table *key*." These are the same. The '521 patent itself describes its system as storing / retrieving "digitally-indexed information." CommScope expert confirmed that Khan's lookup encoder generates a key. (A349 at 107:18-23.)

from the PA.” Khan explicitly shows that in Figure 1. (*See* ECF 451 at 10.) Dali says its expert said he would not consider signals “passed through” the dominant filters in Khan to be representative<sup>12</sup>. But this testimony does not dispute that Khan’s process *starts* with the feedback signal from the PA. That is all the ‘521 patent requires.<sup>13</sup>

Dali says the CommScope’s expert testimony was “insufficient.” First, Khan “speaks for himself.” ArthroCare Corp. v. Smith & Nephew, Inc., 406 F.3d 1365, 1374 (Fed. Cir. 2005). Second, CommScope’s expert does not need to rebut irrelevant distinctions. Dali’s distinction about filtering is irrelevant because Claim 1 does not exclude filtering. Dali notes CommScope’s expert did not specifically focus on the word “representative.” CommScope’s expert does not have to focus on an individual word. The issue is the claim element. CommScope’s expert testified the element is disclosed. (AA349 at 106:10-17.) Dali says Khan does not “show on the face” that the feedback signals are representative of the power amplifier. Not true. Figure 1 shows on its face that the establishing process *starts* with the feedback signal from the PA, which is what the specification in the ‘521 patent teaches is the relevant inquiry. Dali says Kahn says the feedback signal is not representative because it is “only a sample.” The definition of “sample” is “a portion, piece, or segment that is *representative* of a whole.” (A1249; A1253.)

## **II. The Court should grant JMOL that Claim 1 of the ‘521 patent is not infringed**

### **A. The limitation on the controller itself: “switching a controller off to ....”**

Dali did not dispute this element requires the controller *itself* be switched off. The issue is not whether the product switches phases, switches between PAs, or switches signals on/off.

*First*, Dali confirms this issue is ripe for JMOL. Dali did not identify a dispute about

---

<sup>12</sup> Dali says Khan’s filters restrict the “bandwidth.” Why is bandwidth relevant to whether the signal is representative? Dali provides no explanation. We know it is not because the specification never mentions the “bandwidth” of the feedback signal. Dali selectively quotes Khan. Khan says: “After the look-up table is obtained, *any arbitrary bandwidth signal* may be applied through the look-up table . . .” (A552 at 2:27-29 (emphasis added).)

<sup>13</sup> Dali did not dispute another key point. While Dali’s expert said the feedback signal that “passes through” the filters is not representative (i.e., the signal after the filters), he did not dispute the feedback signal before the filter is representative. That pre-filter signal meets the claim element *even under Dali’s theory*. CommScope opening brief pointed out that Dali’s theory would require assuming a requirement that is not in the claim (about “directly” vs. “indirectly”) to avoid this. (ECF 451 at 12.) Dali did not dispute CommScope’s observation or provide any response.

how the accused product operates. 5A Chisum on Patents § 18.06 (2019) (collecting cases and explaining: “Thus, as noted above, decisions treat the existence of infringement as a ‘question of law’ when the basic facts are undisputed.”). The basic facts here are undisputed:

(1) The switch is always operating to select and output a signal.

(2) The structure controlling the switch is always operating to send control signals.

(See A343-44 at 82:19-87:24.) The test for whether something is in a “nonoperating” state is simple: did that thing stop its operations? The undisputed facts show the answer here is: no.<sup>14</sup>

*Second*, the Court can simplify the analysis. Dali’s brief confirms it was not sufficient to identify a switch to establish this element. To overcome this, Dali says it showed the following:

Dr. Kenney testified that documents describing the functioning of the accused device show that the controller is switched off because they show a switch, the switch is associated with logic on an FPGA *acting as a controller*, and *that placing that controller in a non-operative state disconnects signal from a single power amplifier.* (A281 at 61:4-62:7.)

(ECF 454 at 18 (emphasis added).) To simplify, CommScope asks the Court to read A281 at 61:4-62:7. Dali’s expert never said the italicized language. Dali’s expert (a) focused on a switch and (b) discussed switching the *signal* off (not the controller). Dali’s expert never said that the “logic” itself is switched off or placed in a nonoperating state (or clearly said the logic is the controller). Dali’s expert conflated switching the signal off with switching the controller off.

Real scrutiny is due here. Dali said more was needed from the Wright reference to meet this element. Dali must be consistent. Dali was well aware it needed to show the controller itself is switched off. Dali fought – and lost – this issue at claim construction. Dali’s expert returned to Dali’s original construction (which the Court did not adopt). Dali’s brief was mute on this.

It is not substantial evidence for the expert to simply frame the accused feature as meeting the claim language. Dynacore Holdings Corp. v. U.S. Philips Corp., 363 F.3d 1263, 1278 (Fed. Cir. 2004) (“... a party may not avoid that rule simply by framing the expert’s conclusion as an assertion that a particular critical claim limitation is found in the accused

---

<sup>14</sup> Dali obliquely acknowledges this. Dali argues, “Whether the controller *is in an operating state* with respect to a second power amplifier at the same time *is irrelevant*.” (ECF 454 at 19 (emphasis added).) Dali is acknowledging the controller in the accused product remains “in an operating state,” but suggests this does not count because it is “with respect to” another PA. The Court’s construction contained no such exception. It was “nonoperating state” – period. It was not “nonoperating state with respect to one power amplifier.”



device.”).<sup>15</sup> Likewise, Dali’s passing reference to “logic” is not sufficient under Federal Circuit law.<sup>16</sup> Evidence must be “substantial.” Guile v. United States, 422 F.3d 221, 227 (5th Cir. 2005) (“An expert’s opinion must be supported to provide substantial evidence.”).

*Third*, Federal Circuit law supports CommScope. In Smith v. Garlock Equip. Co., the claim recited an “arrestor assembly” with an “arm.” 658 F. App’x 1017, 1024 (Fed. Cir. 2016). The disputed element was “wherein the force causes the arm to shift to the lowered position” (the court construed “shift” to mean “pivot”). Plaintiff’s expert testified that the arrestor assembly pivoted. Id. at 1024-26. The Federal Circuit held JMOL of non-infringement should have been granted. Id. at 1027. It emphasized that the claim imposed a limitation on the arm “itself.” Id. at 1025-26. It was improper to conflate the arrestor assembly with the arm itself. Id. Also, in ParkerVision, Inc. v. Qualcomm Inc. (affirming JMOL of non-infringement) the Federal Circuit emphasized that plaintiff’s expert offered “two strands” of testimony that were fundamentally inconsistent. 621 Fed. Appx. 100, 1014 (Fed. Cir. 2015). Dali’s expert also had two strands of inconsistent testimony. Dali’s position that Wright’s switch does not meet the element because the element “also” requires “a controller that is put into a non-operating state by the switch” is fatal to its infringement theory. Dali never showed this limitation for infringement.<sup>17</sup>

*Finally*, Dali’s citation of the “the power amplifier” is a red herring. Dali conflated two constructions. The construction of “the power amplifier” is not about the controller:

“the power amplifier” always refers to the same power amplifier that is introduced in the preamble

(ECF 97 at 8.) The element at issue here is not performed on (or by) the power amplifier; the claim recites that it is performed on the controller.<sup>18</sup> DDR Holdings, LLC v. Hotels.com, L.P.,

<sup>15</sup> Huss v. Gayden, 571 F.3d 442, 460 (5th Cir. 2009) (“say-so of an expert” not sufficient to deny JMOL)

<sup>16</sup> Arthur A. Collins, Inc. v. N. Telecom Ltd., 216 F.3d 1042, 1046 (Fed. Cir. 2000) (“Dr. Helgert did not support his assertion that ‘JNet is a TST switch’ with an explanation of why JNET’s structure renders it a TST switch”); Intellectual Sci. & Tech., Inc. v. Sony Elecs., Inc., 589 F.3d 1179, 1185 (Fed. Cir. 2009) (“Merely referring to the IC-109 multiplexer, however, does not suffice to show infringement.”)

<sup>17</sup> **A third case** is Becton Dickinson & Co. v. C.R. Bard, Inc., 922 F.2d 792, 797 (Fed. Cir. 1990) (affirming SJ non-infringement; cannot dismiss part of product (as Dali tries with the PA) when doing so disregards “specific limitations” on the component as claimed—here that the controller must stop operating, period).

<sup>18</sup> The claim construction record makes clear “the power amplifier” construction resolved a dispute about splitting

773 F.3d 1245, 1254 (Fed. Cir. 2014) (JMOL should have been granted where the plaintiff misapplied the stipulated construction).

**B. The limitation of separate phase: “a training phase ... an operating phase”**

Dali pivots to citing this testimony for the operating phase: “So this is the next step that is starting the operating phase. So we’ve done the training, meaning we have enough information on the PA to begin operating it under digital predistortion.” (See ECF 454 at 17-18.) This merely summarizes the requirement in the claim. It does not provide any analysis or support. Dali says its expert showed (a) the sub-elements of the two phases and (b) the sub-element of switching a controller off. This is non-responsive because the phases are separate requirement.

Dali also mischaracterizes CommScope’s argument and Dr. Wood. Dr. Wood actually said the product does not have separate phases because it “operates all the time.” (A343 at 82:13-18 (“A. No, this -- this just operates. .... It just operates all the time.”); A343 at 83:12-84:20; A344 at 86:3-18.) Dali cites “the power amplifier.” This resolves nothing: both PAs are operating all the time. (See A354 at 127:18-24.)

**III. The Court should grant JMOL that the claims of the ‘473 patent are invalid**

Dali refuses to acknowledge that its expert distinguished Sabat by reading into the claims the ability to “take out the contents” of a signal “one by one” and “distributing them individually” (A376 at 81:24-83:17) and its counsel stressed this point at closing. (A426 at 137:3-14.). Dali also ignored that it convinced Your Honor that the claims did not require any ability to route signals individually. Dali’s trial position was flawed; it was not based on any limitation found in the claims.<sup>19</sup> Instead of defending its flawed position, Dali attempts to re-characterize the trial testimony based on another legally flawed interpretation of the claims.

Dali points to the description of the Sabat reference as a “simulcast” system. This, also,

---

steps, not the controller. The transcript is A1115-228. Clarifying the steps performed *on the power amplifier* cannot be split between different PAs (the same PA must be initialized, trained, and operated). (A1188-89.)

<sup>19</sup> Dali complains about the extent of Dr. Acampora’s testimony addressing the claim limitation at issue, but Dali cannot deny that Dr. Acampora specifically addressed this limitation, provided an illustrated example of how Sabat’s reference taught it, and found the claim limitation to be taught by Sabat, e.g., channel 1 being sent to a second remote and channel 2 being sent to a second remote. (A336 at p. 53:14-24.)



is a legally insufficient basis for attempting to distinguish Sabat. Neither the claims nor any claim construction recite or exclude “simulcast.” The term “simulcast” refers to when one of the signals is carried by at least two of the remote units, e.g., one of the carriers is simultaneously broadcast by at least two remotes. The ‘473 patent itself identifies its preferred embodiment as a simulcast system. (A621 at 9:14-35 (“The term simulcast is frequently used to describe the operation of RRU1 and RRU3 with regard to uplink and downlink signals within Carrier 2 bandwidth.”).)<sup>20</sup> Notably, “simulcast” is used to describe the preferred embodiment even though not all carriers must go to all the remotes. (See A611, A621 at 9:14-35.) Dali’s argument would read Dali’s preferred embodiment out of the claim, which is “rarely, if ever, correct.” On-Line Techs., Inc. v. Bodenseewerk Perkin-Elmer GmbH, 386 F.3d 1133, 1138 (Fed. Cir. 2004).

Regarding claims 15 and 21, Dali suggests that CommScope’s argument is an untimely, new theory. Untrue. CommScope specifically articulated this precise theory at trial that Sabat in combination with the Bauman reference, which teaches daisy-chaining, renders obvious these two claims that recite daisy-chaining. (See, e.g., A335 at 50:16-23; 54:9-18; see also ECF 401 at 34 (Jury Charge).) The contents of the Bauman reference were admitted into evidence. (A677-90.) Motivation to combine the references can be found, as pointed out by Dr. Aampora at trial, in Bauman itself. Sabat is a digital distributed antenna system and Bauman teaches an improvement (daisy-chaining) for a digital distributed antenna system. (See ECF 451 at 21.) Dali’s attempt to mischaracterize the motivation to combine as merely “similar fields of technology” is inaccurate. The disclosures do not relate to similar fields, they are the same field, and specifically the same systems. Dali’s responsive brief does not address the simple, common sense teaching in Bauman explaining where daisy-chaining would be advantageous for a digital DAS, such as when such a system is to be installed along a highway or through a tunnel to avoid having to install expensive and complicated repeaters. (A687 at col. 1:38-47.) Dali’s brief was

---

<sup>20</sup> See also A607 at Abstract (“The present disclosure enables...a distributed wireless network such as a flexible simulcast...network”); A618 at col. 4:9-10 (“it is an object of the present invention to provide a capability for Flexible Simulcast...”). The Sabat reference uses the same definition for simulcast. A672 at [0005] (“A means to distribute the base station’s signals to more than one antenna is termed simulcast.”).

unable to explain why in light of this common sense reason, one of skill in the art would not look to Bauman's daisy-chaining to improve Sabat for applications along highways or tunnels.

Regarding Section 112, Dali asserts that the '473 patent discloses that the remote units are able to selectively forward less than all the signals they receive to another remote unit along a daisy-chain. But there is no disclosure of this feature in the '473 patent. In the '473 patent, each remote customizes what is output at its own antenna port, not what is sent to another remote over a cable port. (A619 at 6:47 ("at the antenna port"); 6:59 ("at the antenna port"); A620 at 7:2; 7:3.) The DUCs of the remotes are never described as selecting signals for output to the "optical port" that leads to the next remote in the daisy-chain. (A620 at 7:6 ("second optical port").) The specification states that it is the software settings of the second remote that determine which signals it will use, not the software settings of an upstream remote unit. (A620 at 7:9-10 ("The software settings within RRU4 are configured...such that Carriers 1, 4, 5, and 8 are present in downlink output signal 112 at the antenna port of RRU4.")) Dali dodges the issue. Nothing Dali cites describes that remotes would be performing this function on behalf of another remote.

#### **IV. The Court should grant JMOL that the claims of the '473 patent are not infringed**

As to claims 6, 11, and 21, Dr. Acampora did not admit CommScope's ION-E product meets the limitations at issue. He said the opposite, and Dali's contrary assertion ruins Dali's credibility. Dr. Acampora stated, "So in regard to the first limitation, wherein the host unit is capable of sending, that limitation, that's not in the ION-E. So for that reason, the ION-E would not infringe." (A331 at 33:24-34:2; 31:25-32:15 ("[The '473 invention] -- this would be a capability of the host itself. . . . In the ION-E product . . . the switch is not doing it by itself.")) The passage cited by Dali was about a hypothetical system, not the ION-E, and addressed whether or not certain hypothetical configurations could satisfy the claims, not the ION-E. (See, e.g., A337 at 60:22-23 ("Right. But we're still talking about your hypothetical where we have a star...").) These passages cited by Dali<sup>21</sup> never mention the ION-E system and nowhere

---

<sup>21</sup> Dali's footnote to Mr. Doles' testimony is non-responsive to the issue, which is whether CommScope's system by itself is capable (i.e., without manual intervention) of rerouting the transmission paths. Mr. Doles confirmed it

identified the ION-E system as the topic of the questions or answers.

As to claims 9, 14, and 15. Dali ignores the flaw in Dali's evidence. Dali only presented testimony about what the host unit does in the downlink direction. The claim expressly refers to what the host does in the uplink direction. Nothing cited by Dali responds to this flaw.

Regarding the downlink 10G frames, Dali's brief asserts that it is "undisputed that the ION-E forms bundles of data with a destination address." (ECF 454 at 23.) On the contrary, this was vigorously disputed at trial and in CommScope's JMOL brief. Mr. Doles explained that CommScope's system is incapable of using addresses in the destination fields of the 10G frame. (A325 at 9:22-11:3.) He explained that the recipient is determined by the "dedicated point to point links," e.g., cables, between components of the ION-E system. CommScope is incapable of and never uses addresses in the 10G frames because the dedicated cable links determine which devices receive the signals, not any address inserted into the address field. There is no need for addresses when the frame is only ever transported over a link that leads only to the desired recipient of the frame (a "dedicated" link).<sup>22</sup> This is not an admission; it is a refutation.

#### **V. The Court should grant a new trial on infringement and invalidity of Dali's Patents**

CommScope's request for a new trial is not "pro forma." The standard for a new trial is meaningfully different than JMOL and involves considering the weight of evidence. There is a good reason to consider the weight of the evidence: Dali encouraged the jury to take improper shortcuts that compromised the weighing of evidence. CommScope asks the Court to consider these examples for the '521 patent.<sup>23</sup> Dali did not dispute the principle that "the court should more closely scrutinize the verdict" where the subject was unfamiliar to the jury (e.g., DPD).

---

cannot do this (A324 at 8:3-9:14) and nothing he said at deposition is inconsistent with his testimony at trial.

<sup>22</sup> By analogy, there is no need put an address on letters if I hand deliver the letters directly to the intended recipient.

<sup>23</sup> Infringement: Dali's brief concedes it was not sufficient to identify a switch to prove infringement. But Dali encouraged the jury to take this shortcut. Dali circled the switch in red and said "And the TI documents show a switch" "So it meets this limitation." Dali's counsel emphasized the switch in closing. Dali also encouraged the jury to use "the power amplifier" as a shortcut to give CommScope's evidence no weight. That also was improper. Invalidity: Dali's brief concedes it was not sufficient to show Bauder lacks a "switch" to defeat CommScope's invalidity defense. But Dali encouraged the jury to take that shortcut. A369 at 53:21-54:1; A429 at 151:20-22 ("There is no switch."). Dali also encouraged the jury to defer to the examiner. (A371 at 61:11-12 ("Q. And so the patent examiner got it right, would you say? A. I think he did.")) But the examiner never considered Bauder.

Dated: October 8, 2019

/s/Philip P. Caspers

Philip P. Caspers (*pro hac vice*)

Samuel A. Hamer (*pro hac vice*)

William F. Bullard (*pro hac vice*)

Nathan D. Louwagie (*pro hac vice*)

CARLSON, CASPERS, VANDENBURGH

& LINDQUIST PA

225 South Sixth Street, Suite 4200

Minneapolis, Minnesota 55402

pcaspers@carlsoncaspers.com

shamer@carlsoncaspers.com

wbullard@carlsoncaspers.com

nlouwagie@carlsoncaspers.com

(612) 436-9600 Telephone

(612) 436-9605 Facsimile

Daniel J. Sheehan

State Bar No. 18174500

DANIEL J. SHEEHAN PLLC

Campbell Centre II, Suite 100

8150 N. Central Expressway

Dallas, Texas 75206

(214) 468-8899 Telephone

(214) 468-8803 Facsimile

dsheehan@dsa-law.com

**Certificate of Service**

I, the undersigned, certify that, on October 8, 2019, I caused the foregoing document to be served on all counsel of record via ECF.

/s/ Philip P. Caspers

Philip P. Caspers (*pro hac vice*)

Samuel A. Hamer (*pro hac vice*)

William F. Bullard (*pro hac vice*)

Nathan D. Louwagie (*pro hac vice*)

CARLSON, CASPERS, VANDENBURGH  
& LINDQUIST PA

225 South Sixth Street, Suite 4200

Minneapolis, Minnesota 55402

pcaspers@carlsoncaspers.com

shamer@carlsoncaspers.com

wbullard@carlsoncaspers.com

nlouwagie@carlsoncaspers.com

(612) 436-9600 Telephone

(612) 436-9605 Facsimile